



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR        | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|-----------------------------|---------------------|------------------|
| 10/528,999   | 01/17/2006  | Ryuji Kitaura               | 1254-0277PUS1       | 8787             |
| 2292 7590 02/04/2010<br>BIRCH STEWART KOLASCH & BIRCH<br>PO BOX 747<br>FALLS CHURCH, VA 22040-0747 |             |                             |                     |                  |
| EXAMINER<br>PATEL, KANJIBHAI B   |             |                             |                     |                  |
| ART UNIT<br>2624   |             | PAPER NUMBER                |                     |                  |
| NOTIFICATION DATE<br>02/04/2010  |             | DELIVERY MODE<br>ELECTRONIC |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael R. Cammarata on 12/15/2009.

The application has been amended as follows:

#### In the Claims:

1. **(Currently Amended)** A 3-D image display unit for displaying a 3-D image configured by a plurality of images, including:

an input part for inputting control information required to display said 3-D image[;], wherein said control information includes information that denotes the 3-D effect intensity of said 3-D image;

a calculation part for calculating an accumulative intensity value that increases together with a display time of said 3-D image according to said 3-D effect intensity; and

a display control part for making a predetermined display operation when said accumulative intensity is over a first threshold value.

2. **(Canceled)**

3. **(Currently amended)** The 3-D image display unit according to claim 1; wherein said display operation includes display of a warning message.

4. **(Currently amended)** The 3-D image display unit according to claim 1;

wherein said display operation includes a parallax adjustment for said 3-D image so as to be reduce a parallax of the 3-D image.

**5. (Currently amended)** The 3-D image display unit according to claim 1;  
wherein said display operation includes forming of a 2-D image from said 3-D image to display said 2-D image instead of said 3-D image.

**6. (Previously Presented)** The 3-D image display unit according to claim 5;  
wherein said display operation includes resuming display of said 3-D image instead of said 2-D image after a predetermined time.

**7. (Original)** The 3-D image display unit according to claim 5;  
wherein said calculation part calculates an accumulative intensity value that decreases together with a time during 2-D image display and said display operation, when said accumulative intensity is under a second threshold value, includes resuming display of said 3-D image instead of said 2-D image.

**8. (Previously Presented)** The 3-D image display unit according to claim 1;  
wherein said unit further includes an input part for inputting an external signal that includes a request signal for switching display between 3-D image display and 2-D image display;

wherein said unit selects either of said 3-D image display or forming a 2-D image from said 3-D image to display said formed 2-D image instead of said 3-D image according to said request signal.

**9. (Previously Presented)** The 3-D image display unit according to claim 6;

wherein said unit further includes an input part for inputting an external signal that includes a request signal for switching display between 3-D image display and 2-D image display;

wherein said request signal is invalidated between when said 2-D image is displayed due to said display operation and when said resuming operation is made.

**10. (Currently amended)** The 3-D image display unit according to claim 1;  
wherein said first threshold value is included in said control information.

**11. (Original)** The 3-D image display unit according to claim 6;  
wherein said predetermined time is included in said control information.

**12. (Original)** The 3-D image display unit according to claim 7;  
wherein said second threshold value is included in said control information.

**13. (Previously presented)** A 3-D image display unit for displaying a 3-D image configured by a plurality of images, including:

an input part for inputting control information required to display said 3-D image;  
and

a display control part for controlling display of said 3-D image;  
wherein said display control part forms a 2-D image from said 3-D image according to a predetermined first condition, displays said formed 2-D image instead of said 3-D image, and displays said 3-D image instead of said 2-D image according to a predetermined second condition,

wherein said predetermined first condition comprises one of a 3-D image display time or an accumulative intensity value of a 3-D effect intensity of the 3-D image being greater than or equal to a predetermined threshold value.

**14-26. (Canceled)**

**27. (Original)** A 3-D image display unit for displaying a right-eye image and a left-eye image of a user separately;

wherein said unit includes:

3-D image forming means for forming a 3-D image from a plurality of images; and

warning display controlling means for forming a warning display for said 3-D image forming means;

wherein said warning display controlling means, in the case where the display time of said 3-D image exceeds a first predetermined time, forms said warning display for said 3-D image forming means.

**28. (Original)** The 3-D image display unit according to claim 27;

wherein said warning display is made as a 3-D image.

**29. (Original)** The 3-D image display unit according to claim 27;

wherein said warning display is made as a 3-D image and other displays are made as 2-D images.

**30. (Previously Presented)** The 3-D image display unit according to claim 27;

wherein said warning display is made as a 3-D image that is displayed at a limiting place within which the user can recognize the image with difficulty.

**31. (Original)** The 3-D image display unit according to claim 27;

wherein said unit further includes:

3-D image decoding means for decoding 3-D image format data; and

separating means for separating said 3-D image data decoded by said 3-D

image decoding means into right-eye image data and left-eye image data.

**32. (Original)** The 3-D image display unit according to claim 31;

wherein the format of said 3-D image format data includes at least a single piece of 3-D image identification information for denoting whether or not object data is used to display a 3-D image, at least a single piece of control information that includes a first predetermined time, and at least a single piece of image data.

**33. (Original)** The 3-D image display unit according to claim 32;

wherein said 3-D image decoding means includes 3-D image control information analyzing means for analyzing 3-D image control information included in said 3-D image format data and image data decoding means for decoding said 3-D image data included in said 3-D image format data.

**34. (Previously Amended)** A 3-D image display unit for displaying a right-eye image and a left-eye image of a user separately;

wherein said unit includes:

3-D image forming means for forming a 3-D image from a plurality of images;

2-D image forming means for forming a 2-D image from said plurality of images;

and

display means for displaying a 3-D image formed by said 3-D image forming means or 2-D image formed by said 2-D image forming means; and

wherein a power supply that includes at least the power of said display means is shut off automatically in the case where a 3-D image display time exceeds said first predetermined time; and

wherein said display means displays said 2-D image formed by said 2-D image forming means in the case where said shut-off power supply is restored before the 3-D image display off-time exceeds said second predetermined time after the power of said display means is shut off automatically.

**35. (Original)** The 3-D image display unit according to claim 34;

wherein said unit further includes 3-D image decoding means for decoding 3-D image format data and separating means for separating 3-D image data decoded by said 3-D image decoding means into right-eye image data and left-eye image data.

**36. (Original)** The 3-D image display unit according to claim 35;

wherein the format of said 3-D image format data includes at least a single piece of 3-D image identification information for denoting whether or not object data is used to display a 3-D image, at least a single piece of control information that includes at least one of a first predetermined time and a second predetermined time, and a single piece of image data.

**37. (Original)** The 3-D image display unit according to claim 36;

wherein said 3-D image decoding means includes 3-D image control information analyzing means for analyzing 3-D image control information included in said 3-D image format data and image data decoding means for decoding said 3-D image data included in said 3-D image format data.

**38-43. (Canceled)**

**44. (Currently Amended)** A 3-D image transmitting method for transmitting a 3-D image configured by a plurality of images, including:

transmitting control information required to control display of said 3-D image[;],  
wherein said control information includes information for denoting the 3-D effect  
intensity of said 3-D image;

calculating an accumulative intensity value that increases together with a display  
time of said 3-D image according to said 3-D effect intensity, and  
making a predetermined display operation when said accumulative intensity is  
over a first threshold value.

**45. (Previously Presented)** A 3-D image transmitting method for transmitting a 3-D image configured by a plurality of images, including:

a step of transmitting control information required to control display of said 3-D  
image;

wherein said control information includes a threshold value related to an  
accumulative intensity value that increases together with a 3-D display time of said 3-D  
image according to a 3-D effect intensity of said 3-D image.

**46-47. (Canceled)**

**48. (Previously Presented)** A 3-D image transmitting method for transmitting a 3-D image configured by a plurality of images, including:

a recording step of recording control information required to control display of  
said 3-D image;



wherein said control information includes information that can take at least two values; and

wherein said control information denotes that a 3-D image is displayed as a 2-D image in the case where said information takes a first value and a 3-D image is displayed as a 2-D image or 3-D image in the case where said information takes a second value,

wherein said control information includes information for denoting which of said plurality of images is to be used to form a display image in the case where a 3-D image is displayed as a 2-D image.

**49. (Canceled)**

**50. (Previously Presented)** A 3-D image display unit for displaying a 3-D image configured by a plurality of images, including:

an input part for inputting control information required to display said 3-D image;

wherein said control information includes display information that can take at least two values; and

wherein said display information denotes that a 3-D image is displayed as a 2-D image in the case where said information takes a first value and a 3-D image is displayed as a 2-D image or 3-D image in the case where said information takes a second value,

wherein said first value indicates that one of a 3-D image display time or an accumulative intensity value of a 3-D effect intensity of the 3-D image is greater than or equal to a predetermined threshold value.

**51. (Original)** The 3-D image display unit according to claim 50;

wherein said control information includes information for denoting which of said plurality of images is to be used to form a display image in the case where said 3-D image is displayed as a 2-D image.

**52-54. (Canceled)**

**55. (Original)** A 3-D image transmitting method for transmitting a 3-D image configured by a plurality of images, including:

a recording step of recording control information required to control display of said 3-D image;

wherein said control information includes a threshold value related to an accumulative value that increases together with a 3-D display time;

wherein said threshold value, when it is a predetermined value, denotes that a 3-D image is displayed as a 2-D image; and

wherein said threshold value, when it is not said predetermined value, denotes that a 3-D image is displayed as either a 2-D image or 3-D image.

**56. (Original)** A 3-D image transmitting method for transmitting a 3-D image configured by a plurality of images, including:

a recording step of recording control information required to control display of said 3-D image;

wherein said control information includes a threshold value required to control display of said 3-D image;

wherein said threshold value, when it is a predetermined value, denotes that a 3-D image is displayed as a 2-D image; and

wherein said threshold value, when it is not said predetermined value, denotes that a 3-D image is displayed as either a 2-D image or 3-D image.

**57. (Previously Presented)** The 3-D image transmitting method according to claim 55;

wherein said predetermined value is 0.

**58. (Original)** A 3-D image display unit for displaying a 3-D image configured by a plurality of images, including:

an input part for inputting control information required to display said 3-D image;

wherein said control information includes a threshold value related to an accumulative value that increases together with a 3-D display time;

wherein said threshold value, when it is a predetermined value, denotes that a 3-D image is displayed as a 2-D image; and

wherein said threshold value, when it is not said predetermined value, denotes that a 3-D image is displayed as either a 2-D image or 3-D image.

**59. (Original)** A 3-D image display unit for displaying a 3-D image configured by a plurality of images, including:

an input part for inputting control information required to display said 3-D image;

wherein said control information includes a threshold value required to control 3-D image display;

wherein said threshold value, when it is a predetermined value, denotes that a 3-D image is displayed as a 2-D image; and

wherein said threshold value, when it is not said predetermined value, denotes that a 3-D image is displayed as either a 2-D image or 3-D image.

**60. (Previously Presented)** The 3-D image display unit according to claim 58; wherein said predetermined value is 0.

### **Contact Information**

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kanji Patel whose telephone number is (571) 272-7454. The examiner can normally be reached on Monday to Thursday from 8 a.m. to 6:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on (571) 272-7413 The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/528,999  
Art Unit: 2624

Page 13

/ Kanji Patel/

Primary Examiner, Art Unit 2624